BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	**CC Docket No. 94-102**
	)	
Amendment of Parts 2 and 25 to Implement the Global Mobile Personal Communications by Satellite (GMPS) Memorandum of Understanding and Arrangements	)	**IB Docket No. 99-67**

REPLY COMMENTS OF TOYOTA MOTOR NORTH AMERICA, INC.

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Toyota Motor North America, Inc. and the U.S. affiliates of Toyota Motor Corporation, including Toyota Motor Sales U.S.A., Inc. (collectively, "Toyota"), hereby offer the following reply comments in connection with the above-captioned Further Notice of Proposed Rulemaking (the "*Further Notice*").[1]

I. INTRODUCTION AND SUMMARY

Many commenters in this proceeding addressed the question of whether the Commission should extend its E911 regulations to cover telematics equipment and telematics service providers ("TSPs"). The overwhelming consensus was that the Commission should not do so. Even public safety entities and coalitions such as the Washington State Enhanced 911 Program and the ComCARE Alliance urged the Commission not to require telematics services to comply with the E911 mandates that were developed for mobile telephony providers.[2]

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[1] Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, *Further Notice of Proposed Rulemaking*, CC Dkt No. 94-102, IB Dkt No. 99-67 (rel. Dec. 20 2002) ("*Further Notice*").

[2] *See* Washington State Enhanced 911 Program Comments at 6; *see generally* ComCARE Alliance Comments.

The commenters generally agreed, first and foremost, that the Commission lacks authority to regulate telematics. Telematics services are information services: TSPs buy telecommunications services, add significant content, and sell the resulting information service to consumers. As such, telematics services are outside the regulatory purview of the Commission.

Nor would the regulation of telematics, even if legally permissible, serve the public interest. No party, not even those few who appear to favor some type of regulation of telematics, proffered any specific evidence that the status quo is unacceptable, or in need of regulation. On the contrary, the evidence demonstrates that telematics services provide benefits to consumers, and to society at large. Among those benefits are increased safety, decreased burden on the public safety infrastructure by way of filtering out non-essential emergency contacts, and a variety of consumer conveniences and services that enhance the driving experience.

In addition, the comments also demonstrated that imposing E911 obligations on telematics services would impose a significant burden on the industry. That burden would raise the price of telematics services to consumers, and could reduce their availability insofar as manufacturers decide not to undertake expensive and laborious vehicle redesigns and large capital investments in new equipment. In this way, imposing E911 obligations on telematics would likely pose a net detriment to public safety as it would reduce the number of telematics units on the road, while producing little or no gain in safety for those telematics units that remain. The Commission should not impose E911 obligations on telematics services or providers.

II. THE COMMISSION LACKS JURISDICTION TO REGULATE TELEMATICS

The Commission asked commenters to describe what (if any) statute provides it authority to regulate telematics services.[3] The comments plainly demonstrate that there is none. Several commenters in addition to Toyota show that the jurisdictional bases for regulation proposed in the *Further Notice* lack merit,[4] and the record at this stage does not support an exercise of Commission jurisdiction in this regard.[5]

As the Commission has recognized, the Communications Act requires that "the classification of a provider should not depend on the type of facilities used ... [but] rather on the nature of the service being offered to consumers."[6] The nature of telematics service is not a telecommunications service, which may appropriately be subject to regulation, but rather, as the commenters agree, telematics is an information service that itself makes use of telecommunications services.[7] In point of fact Lexus Link does not today make interconnected service available to the public. There is no keypad and no way for a Lexus Link customer to reach anyone other than the Lexus Link call center. There is simply no way that a service like Lexus Link could reasonably be considered a "telecommunications service," "telephone service," or "commercial mobile radio service."[8] No commenter – even those who espouse regulation –

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[3] *Further Notice* at ¶ 77.

[4] *See, e.g.*, ATX Comments at 27-30; ITSA Comments at 7-13; OnStar Comments at 15-17; Mercedes Comments at 17-20.

[5] *See generally, e.g.*, Nextel Comments; BRETSA Comments.

[6] Federal-State Joint Board on Universal Service, *Report*, 13 FCC Rcd 11501 ¶¶ 56-57 (1998) ("*Universal Service Report*").

[7] *See, e.g.*, ITSA Comments at 8-9; OnStar Comments at 17-18; Mercedes Comments at 18-20.

[8] *See* 47 U.S.C. § 251(e)(3) (mandating 9-1-1 emergency dialing number for "wireline and wireless telephone service"). *See also Further Notice* at ¶ 77 (discussing sources of jurisdiction).

has suggested a reasonable statutory basis for subjecting telematics to regulation under Title II or the 911 Act, or any other potential source of the Commission's jurisdiction.[9]

Nor could the Commission reasonably subject telematics services to regulation based on the ancillary voice calling feature that some TSPs may offer (and that few subscribers use).[10] OnStar states that its customers can use their embedded telematics units as a kind of virtual mobile phone: the car's speakers act as a telephone earpiece, and a dashboard-mounted microphone acts as a telephone mouthpiece.[11] But it appears that OnStar is the only telematics provider that offers such voice-over-telematics service as one of its features.[12] The Commission should not attempt to regulate the entire suite of telematics services provided by OnStar (or any other TSPs offering similar services), based on that one feature that resembles voice telephony. Nor should the Commission attempt to regulate voice-over-telematics as such, and attempt to impose on the voice-over-telematics feature those obligations that would inure to common carriers or CMRS providers, or any other category of regulated service.

The regulation of voice-over-telematics would be akin to regulating voice-over-Internet – and the Commission should avoid regulating either service. Both telematics and cable broadband are properly classified as information services.[13] Both telematics and cable broadband are technically capable of offering a "telecommunications component," which resembles traditional voice telephony, in addition their core data services.[14] And some

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[9] *See also, e.g.*, Mercedes Comments at 20-24 (rebutting notion that telematics could be subject to ancillary jurisdiction).

[10] OnStar Comments at 5 (describing "additional calling plan" used in "rare cases").

[11] *Id.* at 5-6, 11; Motorola Comments at 4.

[12] ITSA Comments at 9.

[13] Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities, *Declaratory Ruling and Notice of Proposed Rulemaking*, FCC 02-77 ¶ 35 (rel. Mar. 15 2002) ("*Cable Modem NPRM*") (concluding that cable broadband is an information service).

[14] *Cable Modem NPRM* ¶¶ 44-47.

telematics users and some cable broadband users take advantage of that capability, and in fact place telephone calls over their respective information services. But as with cable modems, the Commission should not exert jurisdiction over the voice component of what is essentially an information service, but instead should regard telematics as a "single integrated service" that is not essentially a telecommunications service, and should not be subject to regulation as such.[15]

III. REGULATION OF TELEMATICS WOULD BE CONTRARY TO THE PUBLIC INTEREST

Leaving aside whether the Commission *may* regulate telematics, the record demonstrates that it *should not*. The record is devoid of evidence that telematics services or equipment suffers from a flaw that must be remedied through regulation. On the contrary, telematics services offer significant benefits to consumers, and to public safety. And to burden telematics with E911 phase II compliance would likely reduce the number of telematics units on the road, and thus actually reduce public safety. As the ComCARE Alliance states, "the Commission should be guided first by a policy objective of promoting safety, which we believe means promoting the wide deployment of telematics."[16] The Commission not only lacks a legal basis to regulate telematics; it also lacks a policy basis to do so.

A. The Record Reveals No Need for Regulation

1. The Current System Works Well

Under the current system of telematics call center-based emergency services, there is no detriment to emergency callers. Personnel at the Lexus Link call center, which is operated by OnStar, are trained professionals who know how to handle emergency calls and are

[15] *Id.* ¶¶ 38-39.

[16] ComCARE Comments at 1.

able to discern the nature of a crisis and the appropriate response.[17] The only possible disadvantage to routing calls through a national call center rather than directly to a PSAP is potential delay. Yet, while a few commenters raised this as a vague possibility, they provided no evidence whatsoever that the call center model produces any significant delay in summoning emergency services.[18]

Nor is there any evidence that consumers are at all confused about what will happen when they press the "emergency services" button. As the ComCARE alliance states, "telematics subscribers appear to clearly understand that they are contracting for a dispatch service and that embedded telematics calls are not directly routed to 9-1-1. Indeed the most common day-to-day services are all received from the call center."[19] The record shows that consumers regard telematics as a distinct service that complements cellular telephony, but does not replicate its functions.[20] In this regard, consumers may regard telematics as a separate line of defense in case of emergency, and as a means to avoid delays or other problems that sometimes arise in 911 call centers.[21] Consumers therefore fully expect and desire that their emergency calls will be answered by a privately-operated call center, typically within 5 seconds of initiating the call.[22] Consumers are not confused about, nor are they disserved by, the call-center model

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[17] OnStar Comments at 5.

[18] On the contrary, OnStar states that it typically takes less than five seconds for an emergency call to be answered at its call center. OnStar Comments at 5. And call center personnel perform an important screening function, determining (1) the nature of the emergency, (2) whether emergency personnel are needed, and (3) what sort of emergency personnel (*e.g.* police, fire, or ambulance) should be dispatched. Once connected to the PSAP, then, the call center staff may communicate with PSAP operators quickly and efficiently – one professional to another – in order to summon appropriate emergency responders without delay. *See* OnStar Comments at 5.

[19] ComCare Comments at 31.

[20] *See* Toyota Comments at 8.

[21] *See, e.g.*, Phil Mendelson, "Want an Explanation of DC's 911 Deficiencies? Hold Please," *The Washington Post* B08 (March 9, 2003); Fran Spielman, "Woman's Life Worth $500,000(?): City Settles Bungled 911 Call From Pregnant Mom," *The Chicago Sun-Times* (Jan. 9, 2001).

[22] *See* OnStar Comments at 5.

employed by TSPs, but instead willingly contract with TSPs in the "clear expectation that activating the emergency feature will establish contact with the telematics provider, not public emergency services."[23] The record shows no problem with telematics services today that would require regulation.

2. The Current System Provides Important Safety Benefits

Moreover, the current system allows PSAPs to receive important data that might otherwise be inaccessible. Many, if not most, PSAPs are currently unable to accept and process automatic location information from wireless carriers. By contrast, a Lexus Link operator can describe the precise location of an accident to any PSAP operator, anywhere in the country, without regard to the technical readiness of that PSAP. Moreover the Lexus Link operator can pinpoint the accident's location with far greater accuracy than is required by the Commission's E911 Phase II regulations,[24] and can communicate that information in plain language that is useful to emergency personnel: for example, "southbound 405; 300 feet past the Sunset Boulevard exit in the car pool lane."

Moreover, the telematics operator can gather and provide this information to emergency personnel even if the vehicle occupants are unconscious.[25] Likewise, the record shows that new technologies may be able to provide additional details about the accident that might be helpful to the emergency responders. Such details – whether the airbags deployed, whether a roll-over occurred, and the speed at time of impact – may be very helpful to emergency responders, and TSPs may ultimately be able to detect and transmit to TSP operators

[23] Washington State Enhanced 911 Program Comments at 6.

[24] *See, e.g.*, Mercedes Comments at 6.

[25] *See, e.g.*, ATX Comments at 6; OnStar Comments at 4.

such potentially life-saving information.[26] No PSAP is equipped to receive such information automatically, nor is it likely, given PSAPs' struggle even to accept "standard" Phase I and Phase II data,[27] that they will be able to accept such data in the foreseeable future.[28] TSP call centers allow operators to gather all of this information and rapidly assess the need for an emergency response (if any), and then convey that information in an efficient and professional manner to the appropriate PSAP.

The record makes abundantly clear the many benefits offered by telematics, and in particular by the operator-based telematics systems that have now evolved. Telematics operators every year screen out tens of thousands of non-emergency calls and thus allow PSAPS to save money and reduce hold times.[29] Telematics units are always on, unlike a cell phone, and perform functions (like automatic crash notification) that cell phones simply cannot.[30] Telematics as they exist today provide a significant addition to public safety.

3. The Current System Provides Significant Consumer Benefits

The record makes plain that telematics services excel not only at delivering emergency services, but also at delivering other services that are likewise in the public interest. Consumers gain real utility from the various services offered by Lexus Link. Features like Remote Door Unlock and Convenience Services (by which a customer can determine the location of businesses, such as the nearest drugstore or ATM) can of course be somewhat less significant than potentially life-or-death Emergency Services. But these features nonetheless

[26] *See, e.g.,* Press Release, "GM Will Offer Advanced Automatic Crash Notification in 2003," (July 31, 2002) Available at http://www.onstar.com/visitors/html/pr_pressroom.htm. As discussed in Toyota's initial comments, Lexus Link does not currently offer such advanced crash information.

[27] *See* Dale N. Hatfield, *A Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services*, 40 (2001).

[28] *See* Mercedes Comments at 14-17.

[29] *See, e.g.,* ATX Comments at 10-11; OnStar Comments at 9-10.

[30] *See, e.g.*, BMW Comments at 2; ComCARE Comments at 8.

offer significant benefits to consumers – benefits whose value can be measured by the dollars that individual consumers are willing to pay for those features. The Commission has often recognized that the public interest may be served by a consumer product or service even though every member of the public may not use that produce, and even though it may be perceived as a luxury product. The Commission has, for example, set aside spectrum and orbital slots for digital satellite radio,[31] and has allocated significant bandwidth in order to make television pictures more crisp.[32] And given that the various conveniences and services provided by telematics are at least as much in the public interest as are upgraded TV and radio programming, the Commission should carefully scrutinize any action that may reduce the availability of those services, or limit the public's enjoyment thereof.

Nor are these types of convenience services the only public benefit from telematics. Lexus Link offers a host of features that enhance the safety and security of the driving experience. Lexus Link can send a tow truck to a stranded motorist. It can offer a ride or a hotel room to a person who should not or cannot drive. It can locate a stolen car; it can monitor the car's electrical system and transmit a fault or loss of battery power; it can even guide a lost motorist safely to his destination. The services offered by TSPs and manufacturers such as Lexus Link benefit their users, and the public at large. In addition to their ability to summon emergency help, telematics providers offer a package of conveniences and safety features that

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[31] *See, e.g.*, Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, *Report and Order, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd. 5754 ¶¶ 1-2 (1997) (concluding that provision of high quality audio programming to subscribers is "in the public interest").

[32] *See, e.g.*, Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Second Report and Order and Second Memorandum Opinion and Order, 17 FCC Rcd 15978 (2002). Notably, the Commission in that proceeding found it necessary to balance its efforts to upgrade the quality of all television signals and reception (by requiring television sets to contain a digital tuner) against the need to ensure access to low-cost (analog) television signals. *See id.* at ¶ 8.

provide major benefits to their users – benefits that should not be ignored when deciding whether to saddle (and potentially stifle) telematics with onerous regulatory obligations.

B. Regulation Would be Costly and Counterproductive

Significant barriers may lie between telematics services as they exist today, and full compliance with the Commission's existing E911 Phase II requirements for wireless carriers. In part because telematics equipment cannot be changed in a vacuum –it must always be integrated with the vehicle in which it is embedded – and in part because of the technical challenges presented by the telematics control units ("TCUs") themselves, to redesign Lexus Link for full E911 compatibility would be technically difficult and could be prohibitively expensive.

Moreover, uncertainty pending resolution of these questions raises the cost of doing business and delays deployment. Particularly in the context of the digital transition, it would be poor business – and would be bad for consumers – for manufacturers to develop at great cost a digital transition solution, only to have to repeat that process by developing a new product to comply with a new set of regulatory mandates, and potentially to face a large base of stranded and non-compliant embedded units. The Commission has often recognized the cost of "regulatory uncertainty" and its concurrent disincentive to investment,[33] and should seek to avoid uncertainty in this context and its concurrent burden on the telematics industry.

As the record shows, because a telematics unit is embedded in a car and operates off of the car's electrical system, every design change must account for and be integrated with the physical, aural, radio frequency and electrical environment into which it will be placed.[34]

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[33] *See, e.g.*, Principles for Promoting the Efficient Use of Spectrum by Encouraging the Development of Secondary Markets, *Policy Statement*, 15 FCC Rcd 24178 ¶ 15 (2000).

[34] *See* OnStar Comments at 2-3, 13-14; Mercedes Comments at 11-13.

Likewise the existing functions of Lexus Link and similar telematics services would need to be integrated with the modified system to make them compatible with that system: for example, if (as would likely be the case) E911 compliance requires the use of a new type of GPS system, manufacturers would have to ensure that the new GPS system worked in connection with stolen vehicle tracking, driver assist, and all the other location-based services offered by Lexus Link.

There is no evidence that such a massive expenditure of time and money would produce any benefit to safety, or to consumer welfare in general. On the contrary, it would certainly raise the cost of telematics services to consumers, which would have a "major impact on its marketability,"[35] and thereby reduce consumer penetration and adoption of these beneficial services.[36] And regulation could actually limit the availability of telematics, as TSPs might choose to forego telematics offerings rather than make the additional capital investment.[37] Moreover, as several commenters pointed out, the additional financial and technical burden posed by regulation would likely reduce the investment that telematics providers could make in research and development of beneficial new services and capabilities.[38] As one commenter pointed out, telematics does not generate significant profits and given its threadbare economics, the industry could very well "sink under such regulatory weight."[39]

As the ComCARE Alliance states, "the primary safety concern with telematics at the current time is that most automobile companies are not yet deploying these systems."[40] By

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[35] OnStar Comments at 13.

[36] *See* ComCARE comments at 3; ATX Comments at 17-18.

[37] *See, e.g.*, Mercedes Comments at 10-11.

[38] *See, e.g.*, ComCARE Comments at 19; ITSA Comments at 7.

[39] ITSA Comments at 5.

[40] ComCARE Comments at 29.

reducing consumer adoption of telematics – which save lives and contribute significantly to public safety – the imposition of E911 obligations could actually *reduce* public safety.[41]

IV. EVEN IF THE FCC REGULATES SOME TELEMATICS SERVICES, IT SHOULD DO SO IN A WAY THAT IS MINIMALLY INTRUSIVE

The record in this proceeding does not support regulation of telematics. The few proponents of regulation fail to produce any meaningful evidence that demonstrates a need for regulation. And on the contrary, commenters like Toyota and others have demonstrated that regulation would be burdensome, and that by burdening this pro-safety service could actually reduce the overall level of public safety. If, against this evidence, the Commission determines that regulation is necessary in this context, it should be careful to regulate in a minimally-intrusive manner; imposing only narrowly-tailored regulations that are necessary to achieve the clearly defined desired ends, and that by recognizing the unique business reality of the telematics industry avoid causing collateral damage to the industry as a whole.

A. TSPs Should Be Regulated (If at All) Only to the Extent They Provide Mobile Telephony

Even those who urge the FCC to impose E911 obligations on telematics equipment and services apparently would confine this obligation only insofar as they provide interconnected telephony. The Association of Public Safety Communications Officials-International, Inc. ("APCO"), for example, recognizes that, "[t]elematics represents a range of services."[42] It states that, "[t]here are telematics providers that provide phones in vehicles that connect to the public switch, there are services that provide only an ability to speak to a call

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[41] *See, e.g.*, John D. Graham, *Legislative Approaches to Achieving More Protection Against Risk at Less Cost*, 1997 U. Chi. Legal Forum 13 (1997) (citing cases where regulations aimed at improving safety are so costly, and produce so little benefit, that they actually reduce overall safety).

[42] APCO Comments at 8.

center."[43] This distinction is critical in the context of the ultimate question, as to whether a device or service leads to a "reasonable expectation" that a device will provide 911 access.[44]

The *Further Notice* likewise recognizes the importance of this distinction; questioning whether any E911 regulation should be imposed on services that are not, for all intents and purposes, voice telephony.[45] As Toyota described in its initial comments, the "emergency services" button does not provide interconnected and switched service, and customers are not led to expect that the "emergency services" button will connect them with a PSAP.[46] Numerous commenters buttress this point: a telematics "emergency" call is wholly distinct from dialing 911 on a cell phone, and consumers recognize this distinction.[47] The Commission's own logic, then, would demand that if telematics is subject to E911 requirements at all, such requirements should not reach the entire bundle of services, but only those aspects of the service that resemble voice telephony.

Under the Commission's precedent, the fact that some telematics providers may include a voice telephony-like component could not support a decision to impose E911 regulation on the entire suite of information services that TSPs and telematics equipment provides. The logic that a voice component should subject to regulation the entire suite of services would turn the Commission's *Cable Modem* precedent on its head, and would establish a far-reaching pro-regulatory precedent: The availability of voice telephony would subject to regulation and E911 requirements the entire bundle of services included with such voice telephony. This would be a problematic precedent that could lead to regulation of the Internet, or

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[43] *Id.*

[44] *See Further Notice* ¶ 13.

[45] *Id.*

[46] Toyota Comments at 6-9

[47] *See, e.g.*, ATX Comments at 9; ComCare Comments at 30-32.

of bundled offerings like Nextel's (whose push-to-talk functionality apparently does not include E911 compatibility).[48]

It is one thing to require of a service that allows consumers to enter and reach numbers through the PSTN, that this service also allow consumers to enter "911" and thereby to be connected to the relevant PSAP in accordance with the Commission's E911 mandates. It would be quite another to insist that a particular function that is bundled with that telephone-like service likewise perform according to a government-imposed mandate. Whatever it does, the Commission should not assert jurisdiction over the core telematics offerings simply because one such offering may be an "ancillary, add-on" service that resembles voice telephony.[49] The Commission's precedent, the record, and sound policy analysis dictate that, if it regulates telematics at all, the Commission should only regulate the voice telephony component of the service.

B. Any Regulation Must be Gradual, and Must Exempt Existing Devices

The comments overwhelmingly support Toyota's position that if the Commission determines to impose E911 obligations on telematics devices, it should do so gradually, in recognition of the unique character of these devices and of the automotive industry in general.[50] An embedded telematics unit is by definition one component of a much larger system, yet seemingly small changes in the telematics unit can require significant changes in the rest of the automobile system. The telematics unit must be physically accommodated in the car, and its electrical system must be integrated into the car's wiring structure and capacity. Seemingly small changes in an antenna structure, or in its electrical requirements, could require significant

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[48] *Cf.* Nextel Comments at 16 (urging Commission to "be careful not to inject uneconomic, inefficient obligations" on telematics providers).

[49] *See* ITSA comments at 10-11.

[50] *See* AIAM Comments at 2-3; BMW Comments at 3; Mercedes Comments at 13; OnStar Comments at 13-15.

modifications in other components of the automobile. Cars and their various components must be finely engineered, and a change cannot be made to a telematics unit outside the context of broader changes to the vehicle.

Any change to telematics units – including those that might be imposed by regulatory mandate – must consider product development cycles (of three years or more), vehicle model life cycles (of six years or more), and vehicle life spans (potentially of ten years or more). The record shows the unique challenges associated with vehicle product cycles: In contrast with the typical mobile phone that remains in use for only 18-24 months,[51] an embedded telematics unit will likely remain for many years on the road.[52] The Commission must therefore avoid any action that would render obsolete or useless the installed base of telematics units. Among such actions, the Commission should particularly avoid any requirement that TSPs or wireless licensees comply with numerical goals of compliance sooner than would be reasonably achievable given a product lifecycle (including the design cycle and vehicle model cycle) totaling eight years or more and should exempt existing units in operation. Likewise the Commission should recognize the long lead-time required to develop and implement new car designs. The record in this proceeding demonstrates that cars typically are manufactured for several years without a major re-design, and that such re-designs must be planned three or more years in advance.[53] Thus, a re-design mandated today would take at least three years, and perhaps up to eight, to be implemented.[54]

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[51] ITSA Comments at 6.

[52] *See, e.g.*, BMW Comments at 3.

[53] *See, e.g.*, BMW Comments at 3 (citing development cycle of "four to six years from concept to consumer availability").

[54] *See, e.g.*, Toyota Comments at 23.

The Commission should recognize these realities of the automobile industry, just as it has recognized, for example, the "long lead time required for satellite construction," and has tailored its regulations accordingly.[55] And just as the Commission has in the satellite and other industries shaped its regulatory requirements around the economic and technical reality faced by those industries, the Commission should in this context avoid imposing regulatory mandates that are incompatible with the way the industry operates.[56]

Finally, the Commission should recognize the interplay of E911 with its other regulations. With the sunset of the analog cellular requirement, the Commission is effectively requiring telematics providers to transition from analog to digital technology over the next few years.[57] The significance of this transition cannot be overstated: Toyota is currently in the midst of a major redesign of its Lexus Link platform. The engineers who are currently redesigning Lexus Link to make the digital transition are the same ones that would need to implement E911 compatibility. Even leaving aside the additional cost in dollars — the additional cost in human resources would make virtually unthinkable a transition to E911 compatibility contemporaneous with the digital transition. As Mercedes observes, a requirement "to return to the drawing board in the near future for the design of yet another device that will comply with new E911 capability requirements could deal a fatal blow to the industry."[58]

If, against the weight of the evidence, the Commission believes it necessary to impose E911 obligations on telematics units and providers, it should be careful to narrowly tailor such regulations and to provide for a gradual and reasonable timeline for compliance and exempt

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[55] Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Services, *Report and Order*, 17 FCC Rcd 2707 ¶ 28 (2002).

[56] *See, e.g.*, XM Radio, Inc., *Order and Authorization*, 16 FCC Rcd ¶ 4 (2001).

[57] *See* Amendment of Part 22 of the Commissions Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service, *Report and Order*, WT Dkt No. 01-108 ¶¶ 18-20 (rel. Sept. 24 2002).

[58] Mercedes Comments at 12.

existing units in operation. If the FCC determines to regulate, the Commission should at least attempt in this way to minimize the harm that it causes.

V. CONCLUSION

The record in this proceeding leaves little room for doubt. The evidence shows no need to require E911 compliance of telematics equipment and services; and on the contrary it shows much harm that would result from imposing such an obligation. From summoning an ambulance to the scene of a crash, to helping track and locate a stolen vehicle, to helping a lost motorist find his way home, telematics services provide major safety and other benefits to thousands of consumers every day. The Commission should not burden this nascent service with costly and difficult regulatory mandates, for which there is no clear need.

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